

Claims

1-5 Canceled

6. (New) A method for operating a hydraulic brake system having an integrated parking-brake function for motor vehicles having at least two vehicle axles, the system including a pedal-operated pressure generator (31), at least one hydraulic pump (4), an operating element (12) which is connected to an electronic control and a regulation unit (9), and wheel brakes (2, 3) provided with inlet and outlet valves (13, 14, 17, 18), with the wheel brakes (2) associated with the second vehicle axle including a device for executing a parking-brake operation, the method comprising:

driving the hydraulic pump (4) in such a fashion that a pressure that is necessary to initiate or terminate a parking-brake operation is built up with a minimum possible pressure-increase gradient.
7. (New) The method according to claim 6, wherein an operator determines a driving mode of the hydraulic pump.
8. (New) The method according to claim 7, wherein when the operating element (12) is shortly actuated by the operator, the hydraulic pump (4) is driven in such a fashion that the pressure required to execute a parking-brake operation is built up more slowly in the wheel brakes (2) associated with the second axle than is the case with an actuation of the operating element (12) over a long period of time.
9. (New) The method according to claim 6, wherein the pressure that is introduced during a service brake phase in the wheel brakes (2, 3) is used to initiate a parking-brake operation.
- 10 (New) The method according 9, wherein at least the following steps are performed in the transition from a service-brake operation to a parking-brake operation:
 - I. Actuation of the operating element (12) by the operator;

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- II. Closing the inlet valves (17) of the wheel brakes (3) associated with the first axle;
- III. Pressure build-up performed by the hydraulic pump (4) in the wheel brakes (2) associated with the second axle;
- IV. Closing the inlet valves (13) and opening the outlet valves (14) of the wheel brakes (2) associated with the second axle and activation of the means for performing a parking-brake operation.